C-535P/536P

E Model
J Model
US Model

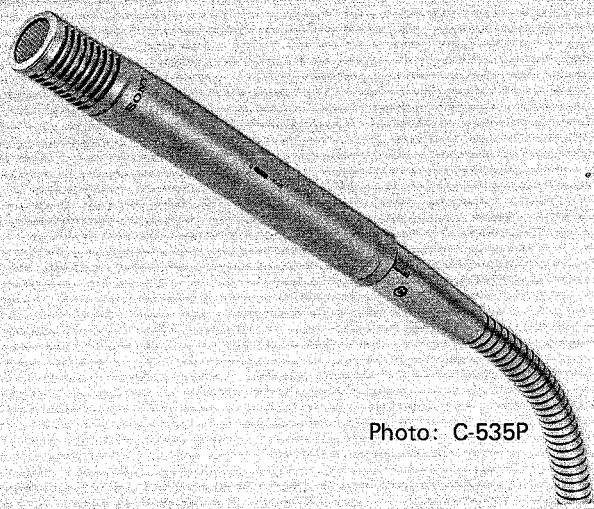

Photo: C-535P

Photo: C-536P

CONDENSER MICROPHONE

SPECIFICATIONS

Type Condenser microphone

Power supply External power:
Phantom powering system
For J and E models, use optional Sony AC-148F external power supply.

Power requirements
Normal operating voltage
48 V dc
Using an external power supply
Minimum operating voltage
Approx. 42 V dc
Current drain
Less than 2 mA

Perfomance Frequency response
30 Hz–16,000 Hz
Directivity
Uni-directional
Pickup direction:
C-535P: parallel to the axis
C-536P: at a right angle to the axis

Output impedance
200 ohms ±20%, balanced
Sensitivity (deviation ±2 dB)
Open circuit voltage[1]: −41.0 dB (8.9 mV)
Effective output level[2]: −40.0 dBm
Recommended load impedance:
More than 3 kohms
Signal-to-noise ratio
More than 72 dB
(1,000 Hz, 1 Pa)
Inherent noise Less than 22 dB SPL
(0 dB = 20 μPa)
Wind noise[3] C-535P: Less than 70 dB SPL
C-536P: Less than 60 dB SPL
Induction noise from external magnetic field[4]
Less than 5 dB SPL/m gauss

1) 0 dB = 1 V/1 Pa (10 μbar), 1,000 Hz
2) 0 dBm = 1 mW/1 Pa (10 μbar), 1,000 Hz
3) Wind noise is the value measured when subjecting the microphone to a wind velocity of 2 m/sec. (6.6 ft./sec.) from all directions to the microphone. The mean value is measured and converted to the equivalent input sound level.
0 dB = 20 μPa
4) The external magnetic field induction noise is measured with the microphone placed in an alternating magnetic field of 50 Hz, 1 milligauss. The maximum noise value is measured and converted to the equivalent input sound level.
0 dB = 20 μPa

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Maximum input sound pressure level (at 1,000 Hz, 1% distortion) 138 dB SPL (159 Pa)
Dynamic range More than 116 dB
Environmental temperatures
−20°C to +60°C (−4°F to +140°F) for storage
0°C to +60°C (32°F to +140°F) for operation

General

Microphone output connector
Cannon XLR-3-12C type
Dimensions Approx. ø 21 × 154 mm (ø $^{27}/_{32}$ × $6^{1}/_{8}$ in.)
Weight C-535P: Approx. 138 g (4.9 oz) excluding supplied accessories
C-536P: Approx. 148 g (5.2 oz) excluding supplied accessories
Finish Satin-nickel finish
Supplied accessories
Microphone holder (PF$^{1}/_{2}$) 1
Carrying case 1
Wind screen 1
Stand adapter
PF $^{1}/_{2}$ to NS $^{5}/_{8}$ 1
(For US model only)

PF $^{1}/_{2}$ to NS $^{5}/_{8}$ 1
PF $^{1}/_{2}$ to W $^{3}/_{8}$ 1
(For E model only)

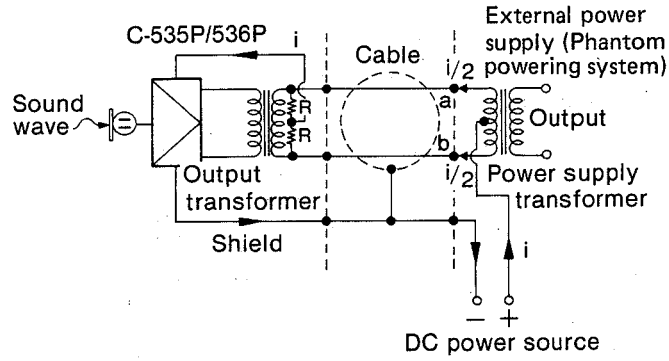
1. TECHNICAL INFORMATION

External power supply system

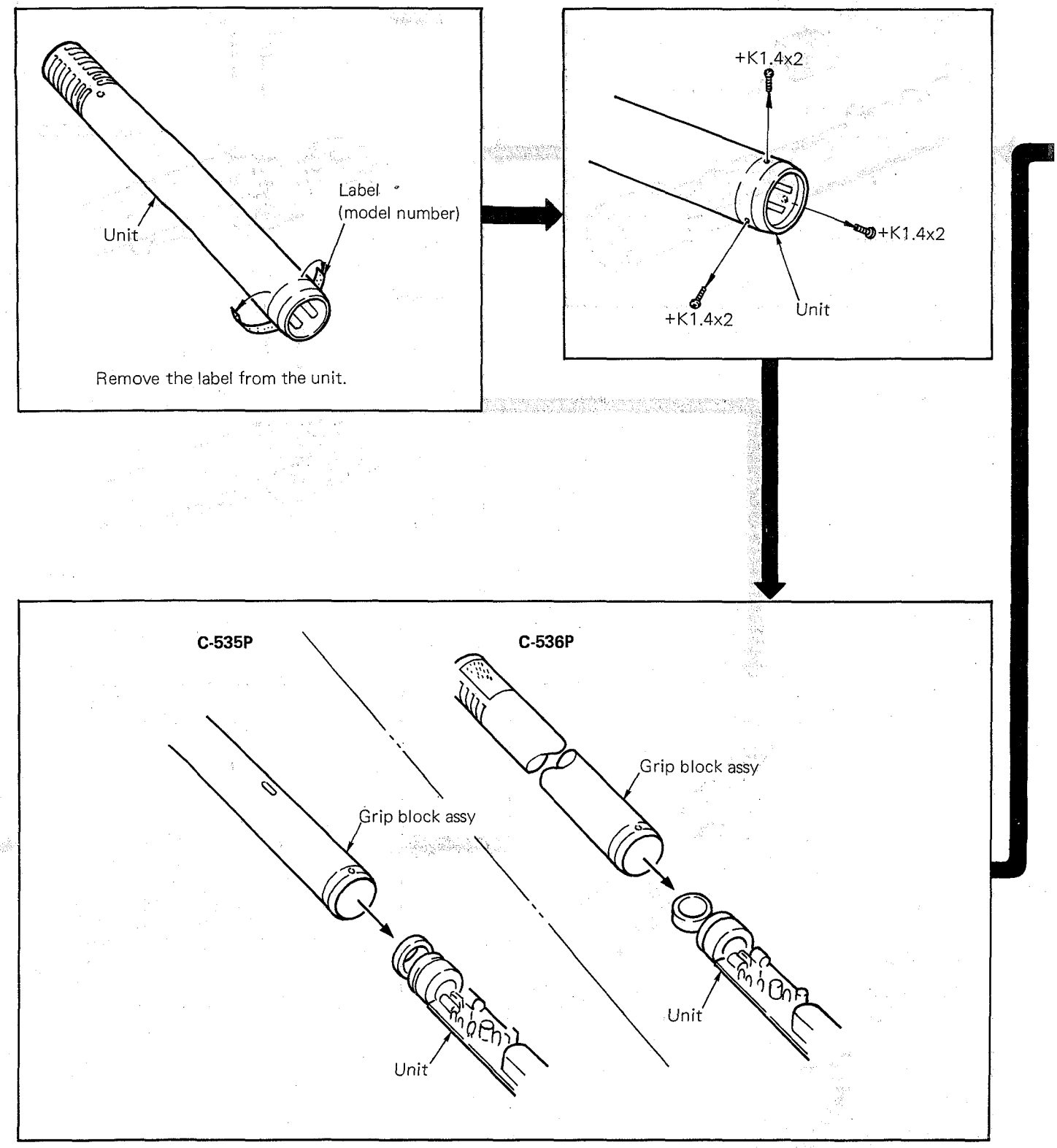
The C-535P/536P utilize an external power supply. This system uses an external dc power source, a standard two-conductor shielded microphone cable, and the transformer of the C-535P/536P. The Sony AC-148F (optional) is recommended as an external power supply. In this form of powering, the supply current (positive potential) is fed to the center-tap of the power supply transformer, and is conducted symmetrically via the "a" and "b" conductors whose original function is to carry the microphone output signal. After these two currents meet at the center of the resistor connecting the conductors, they combine to flow to the microphone. The return current (negative potential) flows through the shield. Even though the phantom powered dc current flows through the conductors, there is no dc voltage difference between the "a" and "b" conductors; therefore, there is no adverse effect on the audio signal.
This powering system may also be used with condenser, dynamic or ribbon type microphones, without causing signal noise, interference or deterioration.

Note

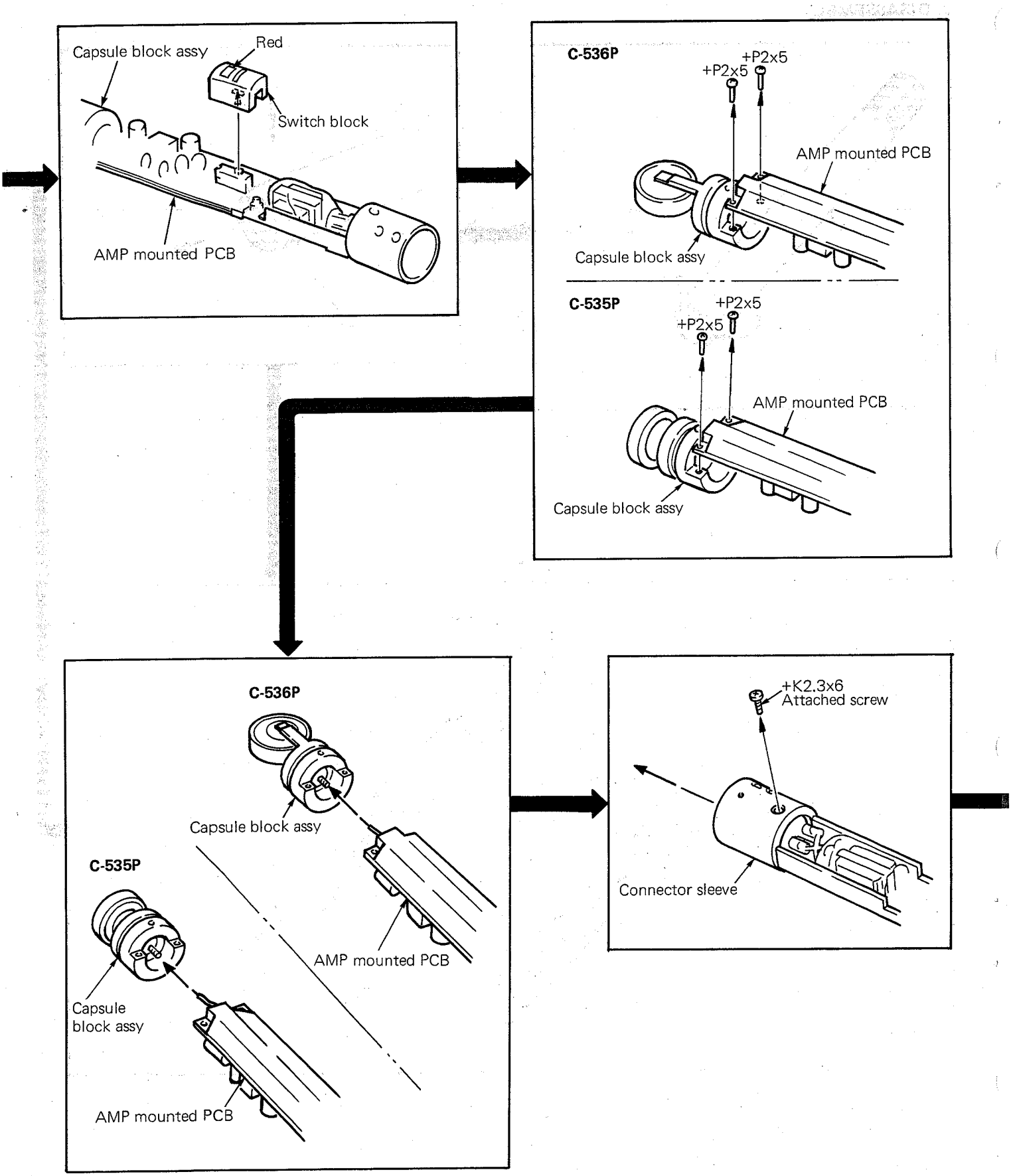
Never use an unbalanced cable to connect the microphone to the external power supply system.

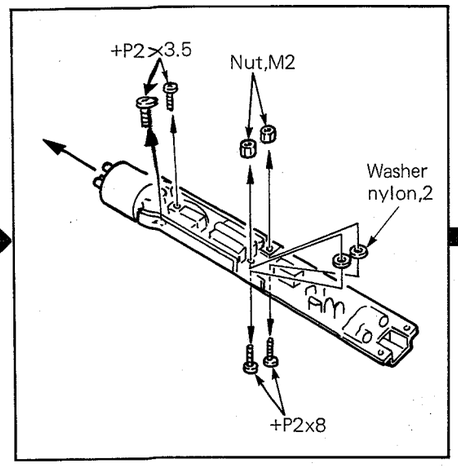


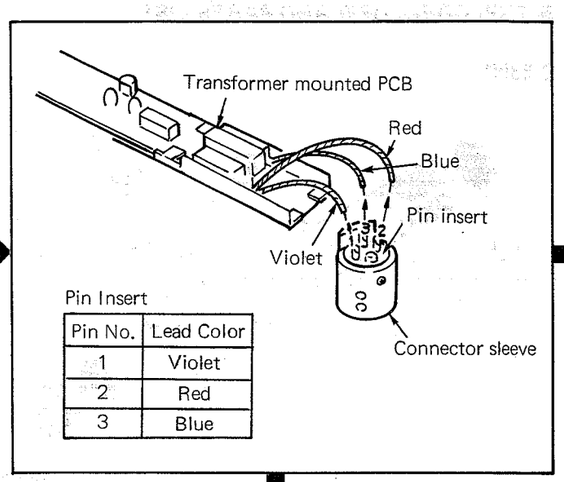
2. DISASSEMBLY



C-535P/536P

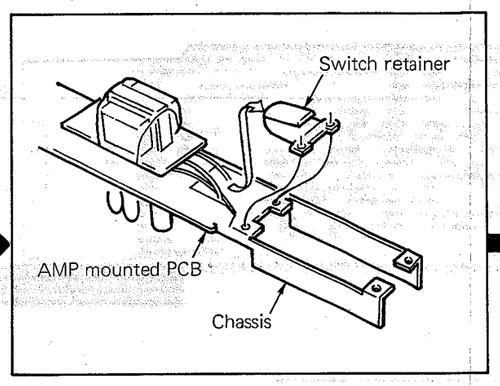

Capsule block assy
Red
Switch block
AMP mounted PCB
C-536P
+P2x5
+P2x5
AMP mounted PCB
Capsule block assy
C-535P
+P2x5
+P2x5
AMP mounted PCB
Capsule block assy
C-536P
Capsule block assy
C-535P
AMP mounted PCB
Capsule
block assy
AMP mounted PCB
+K2.3x6
Attached screw
Connector sleeve

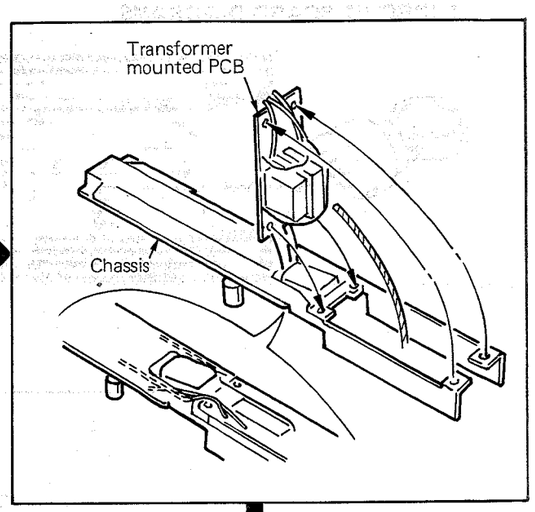




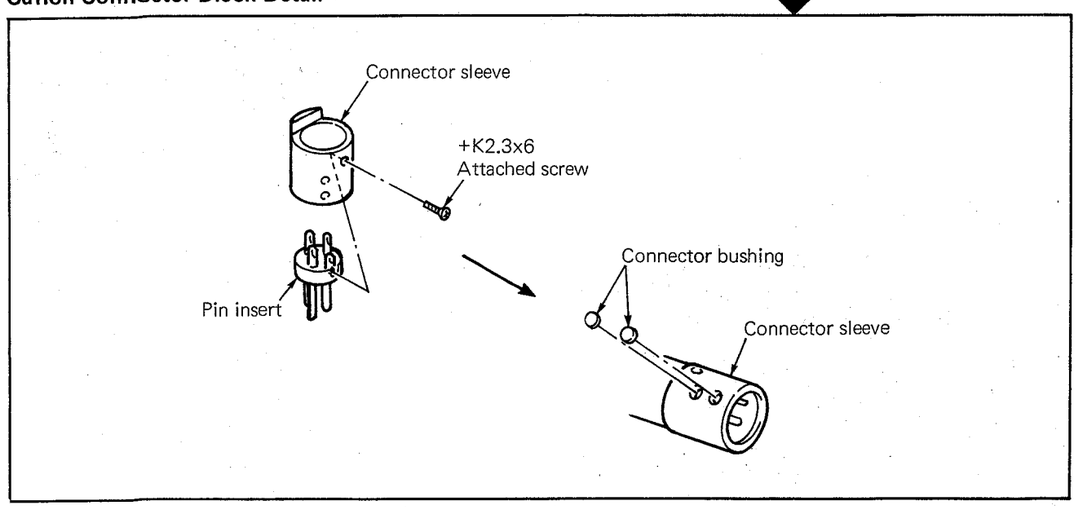
Pin Insert

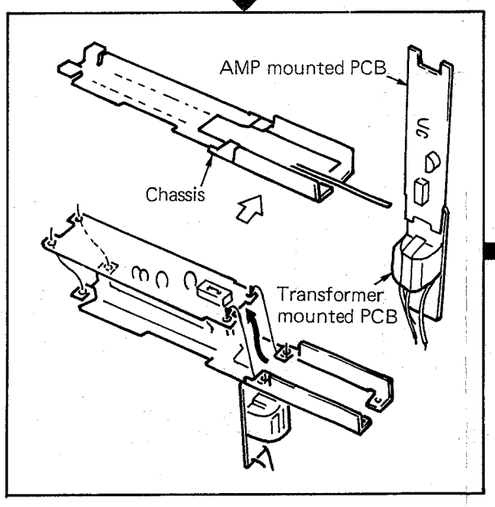
Pin No.	Lead Color
1	Violet
2	Red
3	Blue

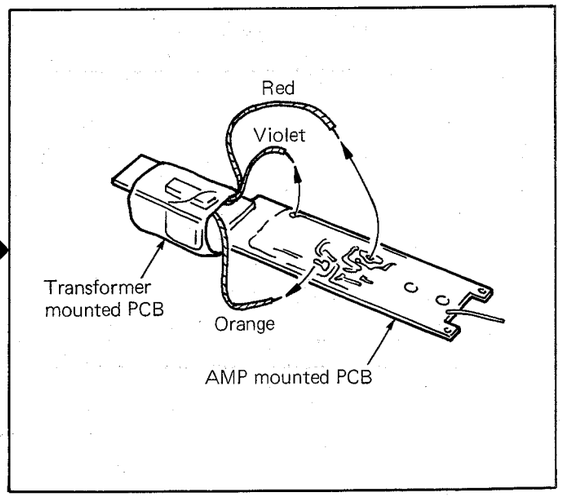




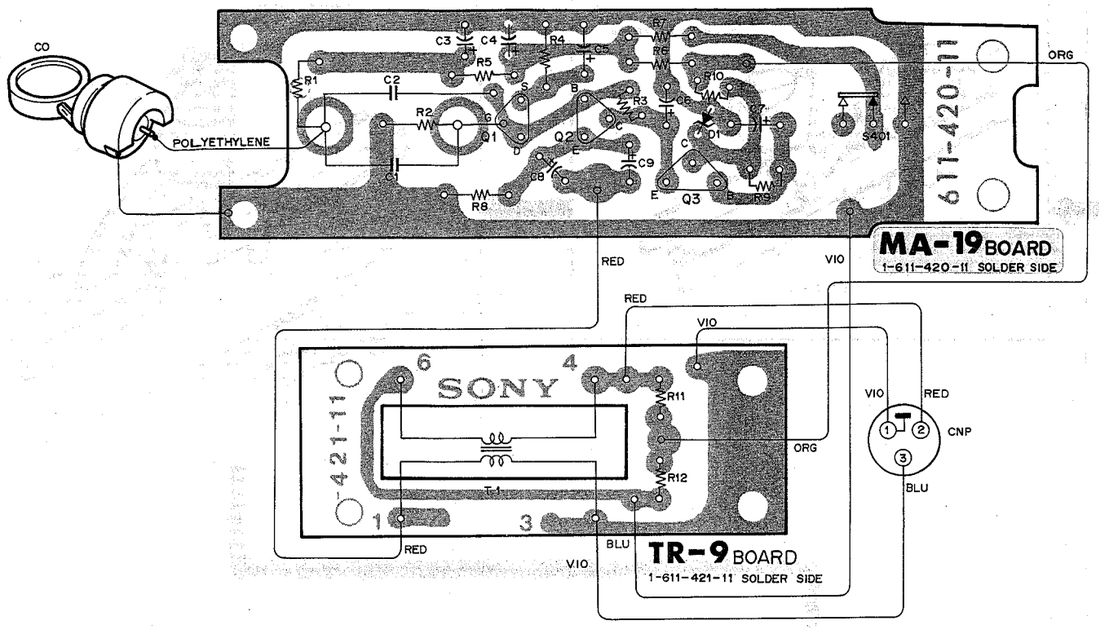
Canon Connector Block Detail



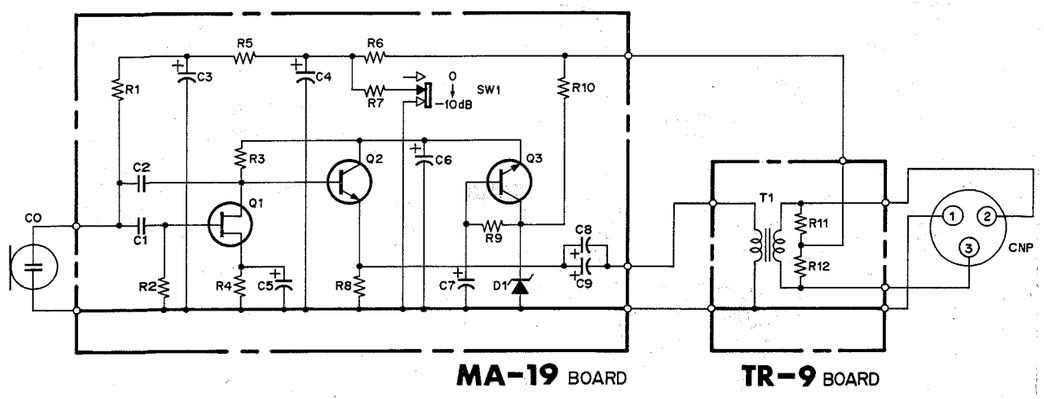




3. CIRCUIT BOARD DIAGRAMS



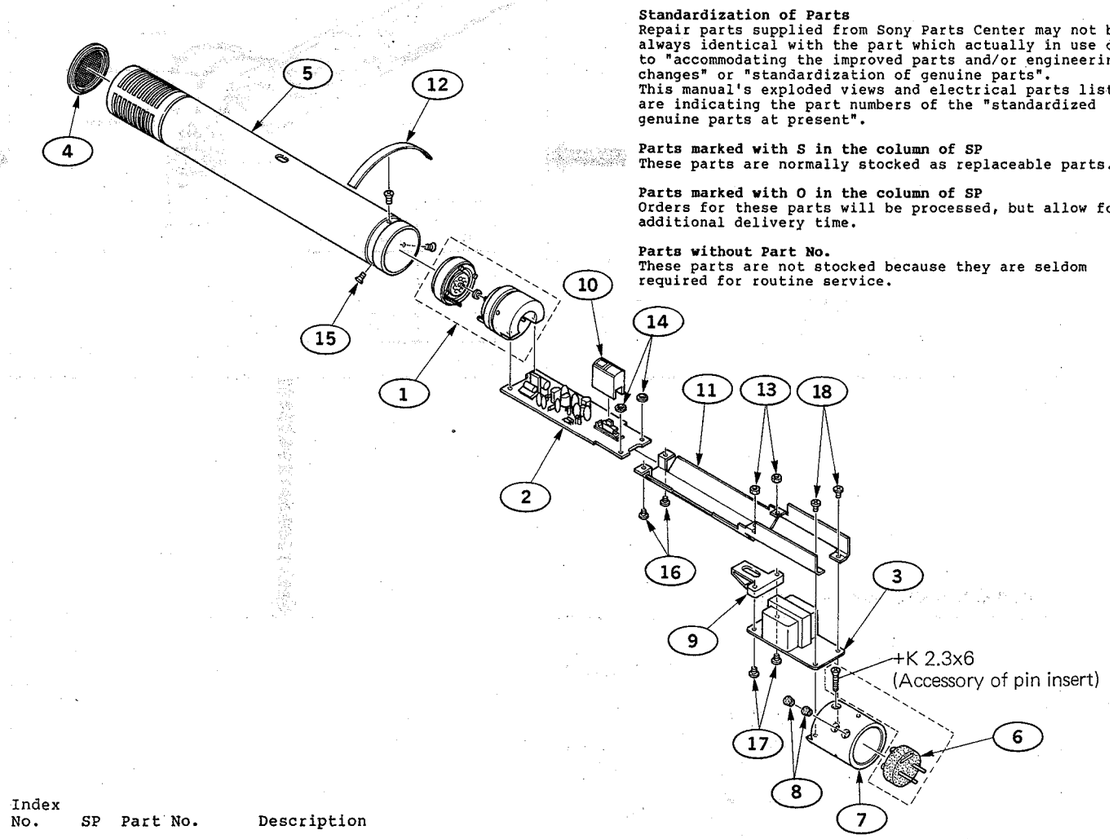
4. SCHEMATIC DIAGRAMS



Note:
The individual parts on the MA-19 board and TR-9 board are not supplied except SW 1.
If any trouble occurs on the board, replace the MA-19 board or TR-9 board.

5. EXPLODED VIEW AND PARTS LIST

C-535P



PARTS ORDERING INFORMATION

Standardization of Parts
Repair parts supplied from Sony Parts Center may not be always identical with the part which actually in use due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts".
This manual's exploded views and electrical parts list are indicating the part numbers of the "standardized genuine parts at present".

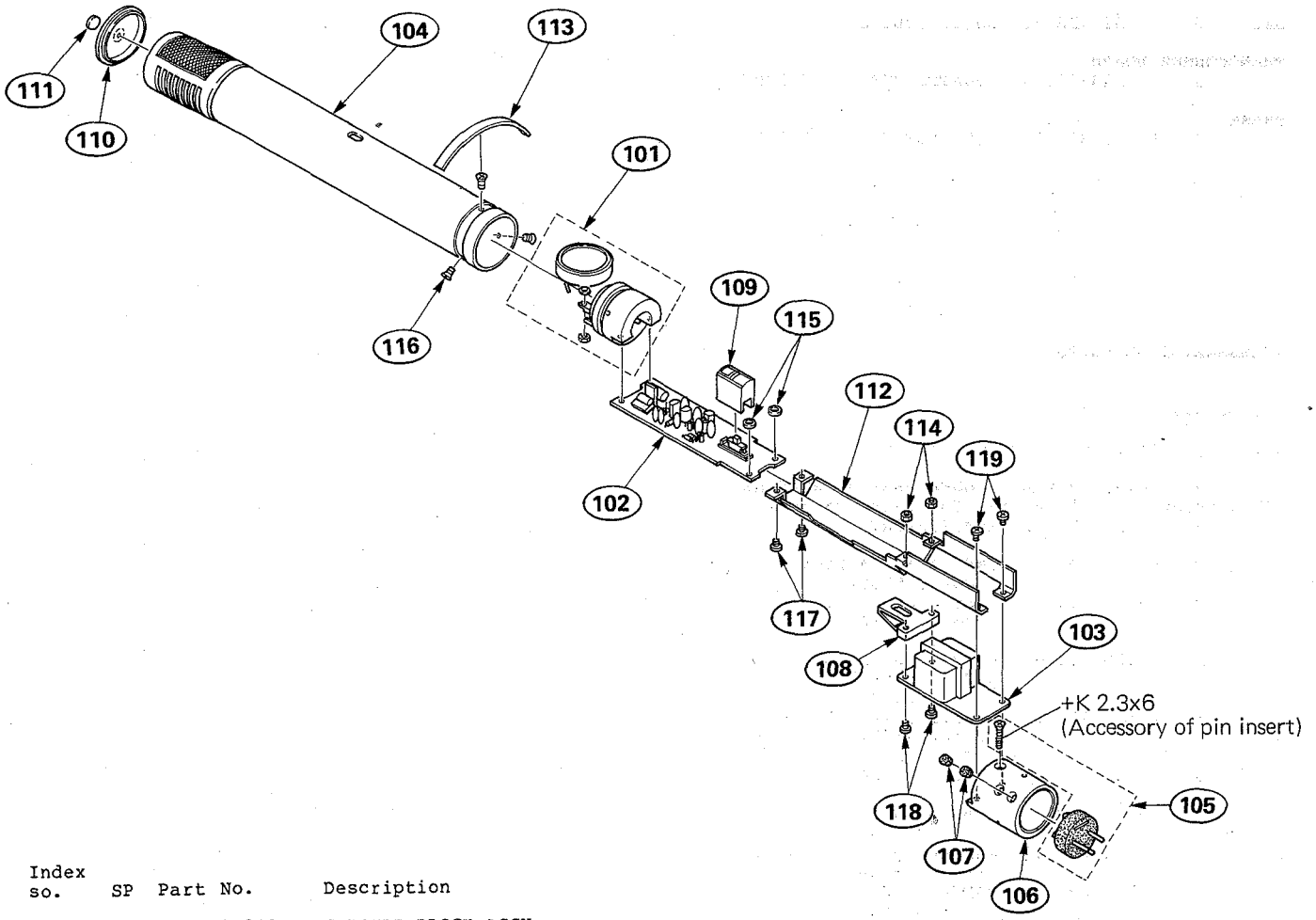
Parts marked with S in the column of SP
These parts are normally stocked as replaceable parts.

Parts marked with O in the column of SP
Orders for these parts will be processed, but allow for additional delivery time.

Parts without Part No.
These parts are not stocked because they are seldom required for routine service.

Index No.	SP	Part No.	Description
1	S	A-4510-041-A	CAPSULE BLOCK ASSY
2	S	A-4518-195-A	MOUNTED PCB,AMPLIFIER
3	S	A-4538-008-A	MOUNTED PCB,TRANSFORMER
4	S	A-4539-001-A	CAP ASSY,TOP
5	S	A-4539-021-A	GRIP BLOCK ASSY
6	S	1-562-836-11	PIN INSERT (XLR-3-14)
7	O	2-535-205-00	SLEEVE,CONNECTOR
8	S	2-535-206-00	BUSHING,CONNECTOR
9	O	2-535-209-00	RETAINER,SWITCH
10	S	2-535-210-02	BLOCK,SWITCH
11	O	2-535-224-01	CHASSIS
12	S	2-535-229-01	LABEL,MODEL NUMBER
13	S	7-622-205-05	NUT,M2
14	S	7-623-922-11	WASHER,NYLON,2
15	S	7-627-451-37	SCREW,PRECISION +K1.4x2
16	S	7-627-553-67	SCREW,PRECISION +P2x5
17	S	7-627-553-97	SCREW,PRECISION +P2x8
18	S	7-627-554-17	SCREW,PRECISION +P2x3.5

C-536P



Index so.	SP	Part No.	Description
101	S	A-4510-042-A	CAPSULE BLOCK ASSY
102	S	A-4518-195-A	MOUNTED PCB,AMPLIFIER
103	S	A-4538-008-A	MOUNTED PCB,TRANSFORMER
104	S	A-4539-022-A	GRIP BLOCK ASSY
105	S	1-562-836-11	PIN INSERT (XLR-3-14)
106	O	2-535-205-00	SLEEVE,CONNECTOR
107	S	2-535-206-00	BUSHING,CONNECTOR
108	O	2-535-209-00	RETAINER,SWITCH
109	S	2-535-210-02	BLOCK,SWITCH
110	S	2-535-217-00	CAP,TOP
111	S	2-535-220-00	EMBLEM,CARDIOID
112	O	2-535-224-01	CHASSIS
113	S	2-535-228-01	LABEL,MODEL NUMBER
114	S	7-622-205-05	NUT,M2
115	S	7-623-922-11	WASHER,NYLON,2
116	S	7-627-451-37	SCREW,PRECISION +K1.4x2
117	S	7-627-553-67	SCREW,PRECISION +P2x5
118	S	7-627-553-97	SCREW,PRECISION +P2x8
119	S	7-627-554-17	SCREW,PRECISION +P2x3.5

6. ELECTRICAL PARTS LIST

Ref. No.	SP	Part No.	Description
AMPLIFIER BOARD			
-	S	A-4518-195-A	MOUNTED PCB,AMPLIFIER
(This assembly includes the following parts.)			
SW1	S	1-552-430-21	SWITCH,SLIDE
TRANSFORMER BOARD			
-	S	A-4538-008-A	MOUNTED PCB,TRANSFORMER
FRAME			
-	S	1-562-836-11	PIN INSERT (XLR-3-14)

ACCESSORIES SUPPLIED

C-535P/536P

Qty	SP	Part No.	Description
1	S	A-4581-029-A	HOLDER ASSY,MICROPHONE
(This assembly includes the following parts.)			
1	S	2-535-230-01	ARM,SUPPORT
1	O	X-2535-201-0	CASE ASSY,CARRYING (For C-535P)
1	O	X-2535-203-0	CASE ASSY,CARRYING (For C-536P)
1	S	2-525-614-00	ADAPTER,STAND SCREW (PF1/2 NS5/8) (For E and US Models)
1	S	2-525-615-00	ADAPTER,STAND SCREW (PF1/2 W3/8) (For E Model)
1	S	2-535-208-00	SCREEN,WINDOW
1	S	3-773-655-01	MANUAL,INSTRUCTION (For J Model)
1	S	3-773-655-12	MANUAL,INSTRUCTION (For E Model)
1	S	3-773-655-21	MANUAL,INSTRUCTION (For US Model)

C-535P/C-536P (E/J/US)
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